ABSTRACT

Methods, devices and a software product for generating a sinusoidal signal of a desired frequency at a desired sampling rate. If the frequency is higher than the upper limit, a coefficient is determined as a function of the sampling rate and a sample of the first output sample sequence is determined as a linear combination of the coefficient and two previous output samples. The first output sample sequence is decimated by the sampling rate. If the frequency is lower than the lower limit, the coefficient is determined as a function of the sampling rate and the sample of the first output sample sequence is determined as a linear combination of the coefficient and two previous output samples. The first output sample sequence is multiplied so as to generate a second output sample sequence. The second output sample sequence is decimated by the sampling rate.

(Figure 2)